State Buildings Program CMGC/GMP 101

December 2022



AGENDA

- Know your Role
- What is CM/GC
- Completing the Recitals
- Design Process
- Guaranteed Maximum Price
- Contingency
- Amendment 1- GMP
- Amendment 2 Direct Cost of Work / Buyout
- Change Management



Know Your Role

- Become familiar with the Basic Steps for GMP, the Agreements and the General Conditions
 - SC5.2 AE CMGC
 - SC6.50/SC6.51 CMGC Agreement & General Conditions
 - SC9.0/SC9.1 DB GMP Agreement & General Conditions
- Keep your files up-to-date. Including internal budgets, change logs and schedules.
- Communicate!
- Schedule your Partnering Sessions
- Be timely on your responses
- Hold your A/E and Contractor Accountable



What is CM/GC?

"A specific variation of construction management in which the public owner engages both a project designer and a qualified construction manager under a negotiated contract to provide both preconstruction services and construction. The CM/GC provides consulting and estimating services during the design phase of the project and acts as the general contractor during construction, holding the trade contracts and providing the management and construction services during the construction phase. The degree to which the CM/GC provides a cost and schedule commitment to the public owner is determined during the negotiation of the final contract. (This is a risk issue. If there is no risk involved, it is not CM/GC.)"

CM/GC: Construction Manager / General Contractor

CM/GC Guidelines for Public Owners, second edition © 2007 by the Associated General Contractors of America and the National Association of State Facilities Administrators.



What it is not:

- State CMGC is not "Design Assist" where a general contractor is hired during the design process merely to provide value-added services to the owner and the design team.
 - OSA currently does not have the statutory authority to hire contractors in this way. They would need to hired through State Procurement and Contracting as a true "Service" not "Construction". We can hire Project Management Services
- It is not a Design/Bid/Build delivery where the contractor is hired during design and bids the project when the design team completes 100% Construction Documents



What it is = Article 3:

Pre-Construction Services

- Budgeting, Consultation and Value Engineering provide alternatives
- Provide a Guaranteed Maximum Price for the Design team to complete the design based on this price
- Responsible for the Bid Process

Standard Construction Services

- Supervise and direct the work as provided in the CD's
- All the usual requirements of a general contractor



Recitals

Appropriation

WHEREAS, the State of Colorado has appropriated and the Principal Representative has been authorized to expend the total sum of Insert dollar value written in words Dollars (\$______) for this Project including all professional services, construction management/general contractor services, construction/improvements, Project contingencies, reimbursables, furnishings, movable equipment, and miscellaneous expenses; and

"Appropriations" is exactly as described. It includes professional services, construction, contingencies, reimbursables, FFE and all miscellaneous project costs (think total SC4.1)



Fixed Limit of Construction

WHEREAS, in accordance with Article 5 Compensation the Construction Manager's Total Fee and General Conditions for the Project is <u>Insert dollar value written in words</u> Dollars (\$______); and

- Typically established when the appropriation is approved as part of the budget and subsequent Construction Project Application (SC4.1)
- FLC is the dollar value that the Owner is willing to spend on construction.
- It should match what was put in the A/E contract as their FLC - It is what they are designing!
- If an agency/IHE is able to increase the FLC with cash, transfer or supplemental appropriation, only then should the FLC change.
- It has no true bearing on the GMP.



Construction Manager's Total Fee

WHEREAS, in accordance with Article 5 Compensation the Construction Manager's Total Fee and General Conditions for the Project is <u>Insert dollar value written in words</u> Dollars (\$______); and

 These are delineated in Exhibit A, Designated Services and Method of Payment

Designated Services and Method of Payment										
CONSTRUCTION MANAGEMENT SERVICES	REQUIRED OF ARCH	REQUIRED OF OWNER								
ON-SITE EQUIPMENT	PRE- CONST SVCS FEE	CONST SVCS FEE	GEN CONDS.	DIRECT COST OF WORK						
	- (1	- P		0 16		(2)				



Article 5 Compensation

1	Pre-Construction Services Phase Fee	\$
2	Construction Services Phase Fee	\$
3	Total Fee (1+2)	\$ 0
Sener	al Conditions	
4	Direct Personal Expenses of On-Site CM/GC Staff (Not to Exceed)	\$
5	Other Reimbursable General Conditions (Not to Exceed per paragraph 9.1.3)	\$
6	Total General Conditions (including Direct Personnel Expenses of Staff) (4+5)	\$ 0
	Total Fee and General Conditions (3+6)	\$ 0



What is Compensation?

<u>Pre-Construction Services Fee</u>: This is the Work prior to the awarding of construction contracts for any bid package. Partnering, Scheduling, Value Analysis, system analysis, constructability

<u>Construction Services Fee</u>: CM general overhead, GMP Financial Responsibilities

<u>General Conditions Fees</u>: Jobsite trailer, general site maintenance; temp heat/electricity etc.; insurance; bonds, Personnel Expenses, closeout, reimbursables



Compensation Continued...

Direct Cost of Work

- Same as Buy-Out.
- When the CM has bid out the work, evaluated those bids and is ready to award subcontracts to those bidders.
- It never includes Bidding or Construction Contingency, however it can reduce these contingencies.

This is when a contractor transitions from CM to GC



Construction Manager's Total Fee

WHEREAS, in accordance with Article 5 Compensation the Construction Manager's Total Fee and General Conditions for the Project is <u>Insert dollar value written in words</u> Dollars (\$______); and

Construction Manager's Fee		
1 Pre-Construction Phase Fee	S	5,000
2 Construction Phase Fee	S	45,000
3 Total Fee (1+2)	S	50,000
General Conditions		
4 Direct Personal Expenses of On-Site CM/GC Staff (*) to Exceed)	lot S	29,438
5 Other Reimbursable General Conditions (Not to Exce per paragraph 9.1.3)	ed S	78,644
6 Total General Conditions (including Direct Personnel Expenses of Staff) (4+5)	~\$~	108,082
Total Fee and General Conditions (3+6)	S	158.082



Key Advantages of CM during Design

- Partnering early
- Add as many alternates as the necessary to stay within the FLC.
- Provide scheduling recommendations, value analysis, system analysis, constructability reviews



Design Process

- Fortunately, design is relatively similar to DBB
- The key is communication and collaboration with the CM
- At SD A/E provides an Opinion of Probable Cost
- A/E must provide a complete set of DD drawings, meeting the requirements of Article 1 of their contract as well as the Code Compliance Plan Review Procedures



Guaranteed Maximum Price

The maximum amount for which the work shall be accomplished as provided by the Construction Manager. It shall include all of the Construction Manager's obligations to be performed pursuant to the terms of the Contract Documents.



GMP

- This is where "At-Risk" is applicable
- It is essentially the contractor "betting" they can complete the scope of work as defined in the DD set within a fixed price that they set
- The Bidding Contingency is there for helping to cover their bets



What's in a GMP?

EVERYTHING

- All the Fees already in the CM/GC contract
- Estimate of all work that needs to be performed but not yet bid
- Allowances that cannot be defined by an estimate
- Any add or deductive alternates
- Contingencies
- Any earlier bid packages



Lets Talk Contingency

Project Contingency (or Owner's Contingency)

C. Dusingt Continuousing (50) Navy 400) Demonstrate D. C. D. Frank)	F. TOTAL PROJECT COSTS	\$ 0.00
G. Project Contingencies (5% New, 10% Renovation - B, C, D, E only)	H. TOTAL BUDGET	\$ 0.00

- Bidding or (Design Contingency)
- Construction Contingency

Bidding and Construction Contingency may be a greater percentage than in the contract templates, but they may not be less!



Project Contingency

- It is the 5 or 10% required of budgeted projects as defined by the SC4.1 document
- It is a percentage on the total project cost, not merely construction
- It can move around any where along the project budget
- It should not be used to increase the scope of work outside of legislative intent
- It should not be used to compensate for construction estimating or bid overages before construction begins

Refer to *Project Monitoring and Cost Management Guidelines* for more information on Contingency Management



Bidding Contingency

- Also referred to as Design Phase Contingency
- It is to cover the cost differences from the DD estimate (GMP) and the subcontractor awards
- After all the subcontracts are bought out it can either be rolled into the Construction contingency or reduce the GMP via an Amendment.



Construction Contingency

Association of General Contractors Definition:

"...is available to the Contractor to cover increased costs incurred as the result of causes beyond its control, such as lost time, increases in bid or negotiated contracts, and acceleration. The CM/GC contingency may also be used to alleviate costs for correcting defective, damaged or nonconforming work; design errors or omissions; subcontractor defaults and unanticipated general conditions expenses."

CM/GC Guidelines for Public Owners, second edition © 2007 by the Associated General Contractors of America and the National Association of State Facilities Administrators.



Construction Contingency

State definition, Article 3.4.5, differs with this statement:

It is not the intent of this Agreement to use the construction contingency for costs incurred during the Pre - Construction phase or bidding phase or for costs to correct any errors, omissions, mistakes or rejected Work caused by Subcontractors.



Construction Contingency

- Beyond subcontractor errors and omissions, Construction Contingency is available to cover any other issue that could not have been "reasonably contemplated" at the time the GMP was set, including:
 - A/E errors and omissions
 - Items missed during the GMP or the buy-out that were not called out in the DD or Bid Documents
 - Buyout overruns if Bidding Contingency is exhausted
 - Other unexpected costs



Amendment 1 - Incorporating the GMP

H Exhibits

- DD documents including all addenda and modifications - can be a list with dates of each document noted
- 2. Schedule of all the bid packages w/ dates anticipated
- Schedule of Values
- 4. Allowance Schedule
- 5. Detailed Critical Path Schedule



GMP Schedule of Values

- Should be comprehensive EVERYTHING
- Typically on contractor letterhead
- Not the same as the Pay Application SBP-7.2 because they are not yet contracted for the Buyout

				\$0.00
(K)	ORIGINAL CONTRACT TOTALS (SUM)	\$0.00	\$0.00	\$0.00
(L)	AMENDMENTS/CHANGE ORDER DEDUCTIONS			\$0.00
(M)	AMENDMENTS/CHANGE ORDER ADDITIONS		10	\$0.00
(N)	PRESENT CONTRACT TOTALS	\$0.00	\$0.00	\$0.00



Start with each item from the Initial agreement

200			
Consti	ruction Manager's Fee		
1	Pre-Construction Services Phase Fee	Ś	/ 45,000
2	Construction Services Phase Fee	\$,110,000
3	Total Fee (1+2)	\$	155,000
Gener	al Conditions		
4	Direct Personal Expenses of On-Site CM/GC Staff (Not to Exceed)	s	75,000
5	Other Reimbursable General Conditions (Not to Exceed per paragraph 9.1.3)	\$	85,000
6	Total General Conditions (including Direct Personnel Expenses of Staff) (4+5)	ß	160,000
	Total Fee and General Conditions (3+6)	\$	315,000
	/		

Transfer this amounts as shown:

}	SUM	MARY OF CHA	NGES	5 / 50	<u> </u>
	12 (0.00) (0.00) (0.00) (0.00)	Construction Services Fee	General Conditions Fee	Direct Cost of Work	Dollar Amount
Original Contract/Date	\$ 45,000	\$ 110,000	\$ 160,000		\$ 315,000
Amendment #1/Date	98 70		8 8	8	
Current Lump Sum Contr	act Price (To Dat	e):	8 8		\$ 315,000



- Add the date, clean up the Excel data
- Insert the GMP from Exhibit H.3

		SUI	ими	ARY OF CH	IAN	GES					
	Pre-Const. Services Fee			Construction Services Fee		General onditions Fee	Direct Cost of Work		Dollar Amount		
Original Contract 6/1/2022	S	45,000	S	110,000	S	160,000			S	315,000	
Amendment #1	S		5	8.	S	3.4	S	10.00	S	<u></u>	
Current Lump Sum Contrac	t Pric	e (To Date	E):						5	315,000	
Guaranteed Maximum Price	e (To	Date):						\rightarrow	S	3,450,000	

 Notice Amendment 1 is listed but no dollar amounts are shown. We haven't bid anything yet.



 Add the Fixed Limit of Construction from the Original Contract

		SUI	MMA	ARY OF CH	IAN	GES					
	Pre-Const. Services Fee		Construction Services Fee		General Conditions Fee		Direct Cost of Work		Dollar Amount		
Original Contract 6/1/2022	S	45,000	S	110,000	S	160,000			S	315,000	
Amendment #1	S		5	- 3	S		S	17.	S	(#	
Current Lump Sum Contract Price (To Date):									S	315,000	
Guaranteed Maximum Pric	e (To D	ate):		2007-0					S	3,450,000	
Current Fixed Limit of Cons	tructio	n Cost (1	To Da	ate):					S	3,500,000	

 Notice that the Fixed Limit of Construction doesn't match the GMP?



Between DD and Buy-Out

- Conduct constructability review(s) for conflicts, overlapping trades, endeavor to confirm necessary work is included in the CD's (at close of each phase)
- Unlike Design/Bid/Build instead to the State, the contractor prepares the bidding information, advertises and conducts bid conferences and receives bids
- Contractors must attempt to receive a minimum of 3 bids per trade.
- Bid openings should be made available for attendance and review



Amendment 2 - Direct Cost of Work

- The Exhibits are specific to each bid package and include:
 - I.1 Bid Documents and Addenda
 - I.2 Schedule of Values for this specific Bid Package and may include any previous Buy-outs if delineated
 - I.3 Labor Overhead forms (SBP-6.18) for each Subcontractor
 - I.4 Allowance Schedule for this package*
 - 1.5 Performance Bond-Increasing with each buy-out
 - I.6 Labor and Material Payment Bond-Increasing with each buyout
 - 1.7 Insurance Certificates**
 - 1.8 Detailed Critical Path Construction Schedule
 - I.9 and I.10 Prevailing Wage and Apprenticeship forms *



What if the GMP Needs to be Increased too?

- Revised H-Documents should be added, CLEARLY denoting the increase(s) for the entire project.
- The I-series is specific to specific to the current bid package.
 - The I-series SHOULD NOT include the Contingency in the Direct Cost of Work
 - It should not include future bid packages
 - If it is differentiated, it is acceptable to have prior bid packages shown on the I-Exhibits



Add the Direct Cost of Work as Amendment #2

	2	SUI	ИΜА	RY OF CH	AN	GES	2		200	
	Pre-Const. Services Fee		Construction Services Fee		General Conditions Fee		Direct Cost of Work		Dollar Amount	
Original Contract 6/1/2022	s	45,000	Ŋ	110,000	63	160,000			S	315,000
Amendment #1 8/1/2022	S	3	S	- E	S	1928	S	3	S	3
Amendment #2	S	- 8	S	32 (to.	13233	\$ 3,	120,420	S	3,120,420
Current Lump Sum Contrac	t Pri	ce (To Da	te):					ica ay ay ay	5	3,435,420
Guaranteed Maximum Price	e (To	Date):							s	3,450,000
Current Fixed Limit of Cons	truct	ion Cas t	ToE	Date):					S	3,500,000



Change Management

- Construction Contingency is added to the Lump Sum Contract Price by Change Order
- It can be used for Construction Services, General Conditions or Direct Cost of work
- Amendments must be used:
 - When both Bidding and Construction Contingency are exhausted.
 - GMP must be increased
 - FLC must be increased
- Final Amendment for reconciliation



Questions?

Please send to:

tana.lane@state.co.us Manager of State Buildings Program

